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GUIDANCE CHANGE NOTICE No. 5
Part 1 Seagoing Ships

GUIDANCE FOR CODE AND CONVENTION INTERPRETATIONS

Volume Y

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Foreword

This Guidance Change Notices (GCN) No. 5 provide amendment and corrigenda to the Guidance for Code and Convention Interpretations (Pt. 1, Vol. Y), 2022 Consolidated edition along with effective date from which these change are applicable. This Guidance also as a reference to all BKI regulations in Part 1 – Seagoing Ship.

Amendments to the preceding edition are marked by strikethrough, red color, and expanded text. However, if the changes involves the whole section or sub section, normally only the title will be in red colour. These new additions and amendments are to be read in conjunction with the requirements given in the GCN No.1 2022, GCN No.2 2022, GCN No.3 2023, GCN No.4 2023, and 2022 Consolidated Edition of the Guidance.

The summary of current amendments for each section including the implementation date are indicated in ***Table 1 - Amendments Incorporates in This Notice.***

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Further queries or comments concerning these Guidance are welcomed through communication with BKI Head Office.

Guidance Change Notice No.5 - April 2024

Table 1- Amendments Incorporates in This Notice

These amendments will come into force in accordance with the date which stated in the notes in each Sub-section.

Paragraph	Title/Subject	Status/Remark
Section 4 - Gas Code		
GC 13	Examination before and after the first loaded voyage	To update this resolution in line with the revised IGC Code (Resolution MSC 370(93)), including its applicability to all gas carriers (not only LNG Carriers), and to clarify the scope of verifications by surveyors during the first full loading/unloading cargo operations
GC 39	Interpretation of 2014 IGC Code (MSC.370(93), as amended) Paragraphs 11.3.1, 11.4.1, 11.4.3 and 18.10.3.2 w.r.t additional bunkering manifold equipment fitted on L.N.G. Bunkering Ships	To provide clarity on the provisions of 2014 IGC Code paragraphs 11.3.1, 11.4.1, 11.4.3 and 18.10.3.2, when considering LNG Bunkering ships fitted with cargo transfer equipment in addition to traditional cargo manifolds.
Section 5 - GF Convention		
GF 19	Fuel Supply to Consumers – single common flanges	To add interpretation of the requirements in part A-1, paragraphs 9.2.2 of the IGF Code
Section 9 - MARPOL Convention		
MPC 12	Annex VI of MARPOL 73/78	Corrigenda (to update the UI to take account of IMO resolution MEPC.328(76))
MPC 29	Annex VI of MARPOL 73/78	To update the UI to take account of IMO Circular MEPC.1/Circ.795/Rev.8.
Section 11 - SOLAS Convention		
SC 120	Access to forecastle spaces on tankers	Corrigenda (to correctly capture the understanding that IACS UI SC 120 (Rev.2) applies to oil tankers and chemical tankers, and to gas carriers constructed on or after 1 July 1986 but before 1 July 2016)

Paragraph	Title/Subject	Status/Remark
Section 11 - SOLAS Convention		
SC 212	Shipboard fittings and supporting hull structures associated with towing and mooring on conventional vessels	To developed in order to clarify new requirements of SOLAS regulation II-1/3-8, adopted by MSC Resolution MSC.474(102) and to also include modifications based on the outcome of review of MSC.1/Circ.1362/Rev.2.
SC 264	Non-combustible material as 'steel or equivalent' for ventilation ducts (SOLAS II-2, Reg. 9.7.1.1)	Corrigenda (to considers the amendments to SOLAS text (MSC.365(93)) that entered into force 1 January 2016, the interpretation remains unchanged.
SC 265	Revised guidelines for cargo securing manual and code of safe practice for cargo stowage and securing - scope of application	To be deleted as all recommendations are considered by MSC.1/Circ.1352/Rev.1.
SC 298	Interpretations of various Performance Standards related to GMDSS radio installations	Corrigenda (To clarify the phrase "installed on or after 1 January 2024" used in various IMO Performance standards, related to GMDSS radio installation, adopted at MSC 105 to supplement the amendments to SOLAS IV, as adopted by resolution MSC.496(105)).
SC 300	Containment of fire: details of fire insulation of duct penetrations	To provides a unified interpretation of requirements in SOLAS regulations II- 2/9.7.3.1.2 and II-2/9.7.3.2, with a view to facilitating their consistent and global implementation.

Section 4 Gas Code

GC 13. Examination before and after the first loaded voyage

(Jan 2008)
(Rev.1 Mar 2016)
(Rev.2 May 2019)
Rev.3 Aug 2023)

~~**Interpretation of paragraphs 4.10.14 and 4.10.16 of the International Code for the Construction and Equipment of Ships Carrying Liquid Gases in Bulk (IGC Code), MSC.5(48) as amended by resolutions MSC.17(58), MSC.30(61), MSC.32(63), MSC.59(67), MSC.103(73), MSC.177(79) and MSC.220(82)**~~

~~**paragraph 4.10.14 states:**~~

~~*"The overall performance of the cargo containment system should be verified for compliance with the design parameters during the initial cool-down, loading and discharging of the cargo. Records of the performance of the components and equipment essential to verify the design parameters should be maintained and be available to the Administration."*~~

~~**paragraph 4.10.16 states:**~~

~~"The hull should be inspected for cold spots following the first loaded voyage."~~

~~and,~~

Interpretation of paragraphs 4.20.3.5 and 4.20.3.7 of the International Code for the Construction and Equipment of Ships Carrying Liquid Gases in Bulk (IGC Code), as amended by Res. MSC.370(93)

paragraph 4.20.3.5 states:

"The overall performance of the cargo containment system shall be verified for compliance with the design parameters during the first full loading and discharging of the cargo, in accordance with the survey procedure and requirements in 1.4 and the requirements of the Administration or recognized organization acting on its behalf. Records of the performance of the components and equipment essential to verify the design parameters, shall be maintained and be available to the Administration."

paragraph 4.20.3.6 states:

Heating arrangements, if fitted in accordance with 4.19.1.5 and 4.19.1.6, shall be tested for required heat output and heat distribution.

paragraph 4.20.3.7 states:

"The cargo containment system shall be inspected for cold spots during, or immediately following, the first loaded voyage. Inspection of the integrity of thermal insulation surfaces that cannot be visually checked shall be carried out in accordance with recognized standards."

paragraph 5.13.2.5 states:

All piping systems, including valves, fittings and associated equipment for handling cargo or vapours, shall be tested under normal operating conditions not later than at the first loading operation, in accordance with recognized standards.

paragraph 13.3.5 states:

The position of the sensors in the tank shall be capable of being verified before commissioning. At the first occasion of full loading after delivery and after each dry-docking, testing of high-level alarms shall be conducted by raising the cargo liquid level in the cargo tank to the alarm point.

Interpretation

~~The above paragraphs shall be interpreted as follows:~~

The verifications and examinations to be carried out as indicated on the above paragraphs shall be interpreted as follows:

Application

This UI applies to all ~~vessels carrying liquefied natural gases (LNG) in bulk which have satisfactorily completed gas trials~~ ships carrying liquefied gases in bulk.

Certification

The following initial certificates shall be "conditionally" issued at delivery subject to satisfactory completion ~~of the first cargo loading and unloading survey requirements below in the presence of a Surveyor~~ of the first cargo loading and unloading survey requirements below in the presence of a Surveyor:

i) Classification Certificate

ii) ~~Short Term Certificate of Fitness for the Carriage of Liquefied Gases in Bulk~~ International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk

Note:

The conditions may either be stated on the Classification Certificate or issued as a Condition of Class in the ~~vessel's~~ ship's Record.

Survey Requirements

- ~~**First Loading (considered to be full loading):**~~

i) ~~Priority to be given to latter stages of loading (approximately last 6 hours)~~

ii) ~~Review cargo logs and alarm reports~~

iii) ~~Witness satisfactory operation of the following:~~

- ~~Gas detection system.~~
- ~~Cargo control and monitoring systems such as level gauging equipment, temperature sensors, pressure gauges, cargo pumps and compressors, proper control of cargo heat exchangers, if operating, etc.~~
- ~~Nitrogen generating plant or inert gas generator, if operating.~~

- ~~Nitrogen pressure control system for insulation, interbarrier, and annular spaces, as applicable.~~
- ~~Cofferdam heating system, if in operation.~~
- ~~Reliquefaction plant, if fitted.~~
- ~~Equipment fitted for the burning of cargo vapors such as boilers, engines, gas combustion units, etc., if operating.~~

iv) ~~Examination of on-deck cargo piping systems including expansion and supporting arrangements.~~

v) ~~Witness topping off process for cargo tanks including high level alarms activated during normal loading.~~

vi) ~~Advise master to carry out cold spot examination of the hull and external insulation during transit voyage to unloading port.~~

● ~~**First Unloading:**~~

i) ~~Priority to be given to the commencement of unloading (approximately first 4 - 6 hours).~~

ii) ~~Witness emergency shutdown system testing prior to commencement of unloading.~~

iii) ~~Review cargo logs and alarm reports.~~

iv) ~~Witness satisfactory operation of the following:~~

- ~~Gas detection system.~~
- ~~Cargo control and monitoring systems such as level gauging equipment, temperature sensors, pressure gauges, cargo pumps and compressors, proper control of cargo heat exchangers, if operating, etc.~~
- ~~Nitrogen generating plant or inert gas generator, if operating.~~
- ~~Nitrogen pressure control system for insulation, interbarrier, and annular spaces, as applicable.~~
- ~~On membrane vessels, verify that the readings of the cofferdam and inner hull temperature sensors are not below the allowable temperature for the selected grade of steel. Review previous readings.~~
- ~~Cofferdam heating system, if in operation.~~
- ~~Reliquefaction plant and review of records from previous voyage.~~
- ~~Equipment fitted for the burning of cargo vapors such as boilers, engines, gas combustion units, etc., if operating.~~

v) ~~Examination of on-deck cargo piping systems including expansion and supporting arrangements.~~

vi) ~~Obtain written statement from the Master that the cold spot examination was carried out during the transit voyage and found satisfactory. Where possible, the surveyor should examine selected spaces.~~

Survey requirements

Surveyor attendance is required at the first cargo loading and first cargo unloading.

Surveyor attendance during new building gas trials can be considered to comply with the below applicable verifications and examinations survey requirements, with the exceptions of the survey requirements marked (**). [1)]

[1)] The symbol (**) indicates survey requirements only feasible to be carried out at the time of first full cargo loading/unloading.

Verifications and examinations at gas trials or first full cargo loading, as applicable to cargo containment system

Note: When attending at first full cargo loading, priority shall be given to latter stages of loading;

- verify the satisfactory functionality of the emergency shutdown system during testing;
- satisfactory operation of gas detection system; satisfactory operation of cargo tank pressure monitoring system;
- satisfactory operation of inter barrier space(s) and insulation space(s) pressure monitoring system, as applicable;
- satisfactory operation of cargo tank temperature monitoring system;
- satisfactory operation of cargo tank level indicating system;
- satisfactory operation of inter barrier space(s) and inner hull temperature monitoring system, as applicable;
- inert gas generator, if operating;
- nitrogen generating plant, if operating;
- nitrogen pressure control system for insulation, inter-barrier, and annular spaces, as applicable;
- reliquefaction plant, if fitted;
- equipment fitted for the burning of cargo vapours such as boilers, engines, gas combustion units, etc., if operating;
- examination of on-deck cargo piping systems including expansion and supporting arrangements;
- verification and examination of all piping systems, including valves, fittings and associated equipment for handling cargo or vapours;[2)]
- advise Master to carry out cold spot examination of the hull and external insulation during transit voyage to unloading port and record in ship's logbook; and
- advise Master to test high-level alarm(s) with liquid cargo during voyage and record in ship's logbook, when loading condition permits.

Verifications and examinations at gas trials or first full cargo unloading, as applicable

Note: When attending at first full cargo unloading, priority shall be given to the commencement of unloading.

- examination of on-deck cargo piping systems including expansion and supporting arrangements;
- review logbook entry of emergency shutdown system testing prior to commencement of unloading;
- (**) review cargo logs and alarm reports for cargo tank pressure, temperature, and level indicating systems;

[2)] Each Classification Society is to ensure that any additional verifications are required to meet own Classification requirements.

- satisfactory operation of cargo compressors;
- satisfactory operation of cargo pumps;
- inert gas generator, if operating;
- nitrogen generating plant, if operating;
- nitrogen pressure control system for insulation, inter-barrier, and annular spaces, as applicable;
- (**) review of records for satisfactory operation of the reliquefaction plant, if fitted;
- review of records for equipment fitted for the burning of cargo vapours such as boilers, engines, gas combustion units, etc.;
- (**) on ships fitted with membrane tanks, review records of the cofferdam and inner hull temperature sensors to verify the readings are not below the allowable temperature for the selected grade of steel;
- (**) cofferdam heating system, if in operation;
- (**) review logbook entries for cold spot examination; and
- advise Master to carry out cold spot examination of the hull and external insulation during transit voyage to unloading port and record in ship's logbook; and
- (**) review logbook entry for testing of high-level alarm(s) with liquid cargo. If cargo conditions did not permit testing, surveyor to require testing at the first occasion where cargo conditions allow for testing. Master to be advised to record testing in ship's logbook which is to be verified no later than the first annual survey.

Documentation to be requested to the Master

To demonstrate satisfactory functionality of the verifications, ship's Master shall be required to arrange and provide to the surveyor print outs or screen shots showing:

- trends of cargo tanks pressure and temperature;
    - trends of pressure and temperature distribution of inter-barrier space(s) and insulation space(s), and temperature distribution of inner hull, as applicable;
    - trends record of performance of cofferdam heating system, when fitted;
    - trends record of consumption of nitrogen gas, and whether any abnormality has been observed;
- list of any gas alarms, if occurred:
    - Cargo Tanks Containment System Cold Spot Inspection Statement; and
    - activation of Cargo Tanks High-Level Alarm and Overfill Protection tests.

Note:

i) *This Unified Interpretation is to be applied by all Members and Associates to ships whose keels are laid, or which are at a similar stage of construction, on or after the 1 July 2008.*

ii) *Rev.1 is to be applied to ships whose keels are laid, or which are at a similar stage of construction, on or after 1 July 2016.*

iii) *Rev.2 is to be applied by IACS Members to ships whose keels are laid, or which are at a similar stage of construction, on or after 1 July 2020.*

iv) *Rev.3 is to be applied by IACS Members to ships whose keels are laid, or which are at a similar stage of construction, on or after 1 January 2024.*

end

GC 39. Interpretation of 2014 IGC Code (MSC.370(93), as amended) Paragraphs 11.3.1, 11.4.1, 11.4.3 and 18.10.3.2 w.r.t additional bunkering manifold equipment fitted on L.N.G. Bunkering Ships

(Sep 2023)

2014 IGC Code Paragraph 11.3.1 states:

11.3 Water-spray system

11.3.1 On ships carrying flammable and/or toxic products, a water-spray system, for cooling, fire prevention and crew protection shall be installed to cover:

.1 exposed cargo tank domes, any exposed parts of cargo tanks and any part of cargo tank covers that may be exposed to heat from fires in adjacent equipment containing cargo such as exposed booster pumps/heaters/re-gasification or re-liquefaction plants, hereafter addressed as gas process units, positioned on weather decks;

.2 exposed on-deck storage vessels for flammable or toxic products;

.3 gas process units positioned on deck;

.4 cargo liquid and vapour discharge and loading connections, including the presentation flange and the area where their control valves are situated, which shall be at least equal to the area of the drip trays provided;

.5 all exposed emergency shut-down (ESD) valves in the cargo liquid and vapour pipes, including the master valve for supply to gas consumers;

.6 exposed boundaries facing the cargo area, such as bulkheads of superstructures and deckhouses normally manned, cargo machinery spaces, storerooms containing high fire-risk items and cargo control rooms. Exposed horizontal boundaries of these areas do not require protection unless detachable cargo piping connections are arranged above or below. Boundaries of unmanned forecastle structures not containing high fire-risk items or equipment do not require water-spray protection;

.7 exposed lifeboats, liferafts and muster stations facing the cargo area, regardless of distance to cargo area; and

.8 any semi-enclosed cargo machinery spaces and semi-enclosed cargo motor room.

Ships intended for operation as listed in 1.1.10 shall be subject to special consideration (see 11.3.3.2).

2014 IGC Code Paragraph 11.4.1 states:

11.4 Dry chemical powder fire-extinguishing systems

11.4.1 Ships in which the carriage of flammable products is intended shall be fitted with fixed dry chemical powder fire-extinguishing systems, approved by the Administration based on the guidelines developed by the Organization [3)], for the purpose of firefighting on the deck in the cargo area, including any cargo liquid and vapour discharge and loading connections on deck and bow or stern cargo handling areas, as applicable.

2014 IGC Code Paragraph 11.4.3 states:

11.4 Dry chemical powder fire-extinguishing systems

11.4.3 The dry chemical powder fire-extinguishing system shall be designed with not less than two independent units. Any part required to be protected by 11.4.2 shall be capable of being reached from not less than two independent units with associated controls, pressurizing medium fixed piping, monitors or hand hose lines. For ships with a cargo capacity of less than 1,000 m^3, only one such unit need be fitted. A monitor shall be arranged to protect any load/unload connection area and be capable of actuation and discharge both locally and remotely. The monitor is not required to be remotely aimed, if it can deliver the necessary powder to all required areas of coverage from a single position. One hose line shall be provided at both port- and starboard side at the end of the cargo area facing the accommodation and readily available from the accommodation.

2014 IGC Code Paragraph 18.10.3.2 states:

18.10.3.2 The ESD system shall be automatically activated on detection of a fire on the weather decks of the cargo area and/or cargo machinery spaces. As a minimum, the method of detection used on the weather decks shall cover the liquid and vapour domes of the cargo tanks, the cargo manifolds and areas where liquid piping is dismantled regularly. Detection may be by means of fusible elements designed to melt at temperatures between 98°C and 104°C, or by area fire detection methods.

Interpretation

1. Due to the specifics of liquefied gas bunkering ships, some of these vessels may be provided with additional cargo transfer equipment including transfer loading arms, bunkering booms, transfer hoses, reducers, spool pieces and transfer hoses reels. This additional equipment can be installed in different locations around the ship.

2. When in use, this additional cargo transfer equipment shall comply, where appropriate, with the requirements of paragraphs 11.3.1.4, 11.3.1.5, 11.4.1, 11.4.3 and 18.10.3.2 of the IGC Code for fire detection and fire protection in the cargo area (such as fusible elements, ESD functionality, water spray system protection, dry chemical powder fire-extinguishing systems and drip trays) including hull protection from low temperatures.

Note:

i) *This UI is to be uniformly implemented by IACS Societies for vessels contracted for construction on or after 1 July 2024.*

ii) *The "contracted for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to IACS Procedural Requirement (PR) No. 29.*

end

[3)] Refer to the Guidelines for the approval of fixed dry chemical powder fire-extinguishing systems for the protection of ships carrying liquefied gases in bulk (MSC.1/Circ.1315/Rev.1)

Section 5 GF Convention

GF 19. Fuel Supply to Consumers – single common flanges

(Dec 2023)

IGF Code Part A-1, Section 9.2.2 reads:

9.2.2 *the piping system for fuel transfer to the consumers shall be designed in a way that a failure of one barrier cannot lead to a leak from the piping system into the surrounding area causing danger to the persons on board, the environment or the ship.*

Interpretation

To comply with part A-1, paragraphs 9.2.2, 9.6.1 and 7.3.6.3 of the IGF Code, two independent safety barriers shall be in place, while, as far as practicable, using a minimum of flange connections. There shall be, no single common flange or other component where one single failure itself may overcome both primary and secondary barriers and may result in a gas leak into the surrounding area causing danger to the persons on board, the environment or the ship.

A single common flange (with two sealing systems) may be accepted at the fuel connection to the gas consumers including GCUs, boilers and components on the engine, such as gas regulating units.

Note:

i) *This Unified Interpretation is to be uniformly implemented by IACS Societies on ships contracted for construction on or after 1 July 2024.*

ii) *The "contracted for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to IACS Procedural Requirement (PR) No. 29.*

end

Section 9 MARPOL Convention

MPC 12. Annex VI of MARPOL 73/78

(July 2004)
(Rev.1 Mar 2006)
(Rev.2 Apr 2014)
(Corr.1 June 2014)
(Rev.3 Aug 2018)
(Corr.2 Dec 2023)

Regulation 1

Application

Regulation 1 reads as follows:

The provisions of this Annex shall apply to all ships, except where expressly provided otherwise. ~~in regulations 3, 5, 6, 13, 15, 16, 18, 19, 20, 21, 22 and 22A of this Annex.~~

Interpretation

For application of this regulation the term "all ships" shall be interpreted as applicable to all ships as defined by MARPOL 73 Article 2 (4).

Note:

i) *This UI is to be uniformly implemented by IACS Societies from 19 May 2005.*

ii) *Rev.1 of the UI is to be uniformly implemented by IACS Societies from 1 July 2006.*

iii) *Rev.2 of the UI is to be uniformly implemented by IACS Societies from 1 January 2015.*

iv) *Rev.3 of the UI is to be uniformly implemented by IACS Societies from 1 January 2020.*

end

MPC 29. Annex VI of MARPOL 73/78

(July 2004)
(Rev.1 Apr 2014)
(Rev.2 Dec 2023)

Regulations 18.5 and 18.6

Application

Regulation 18.5 reads as follows:

For each ship subject to regulations 5 and 6 of this Annex, details of fuel oil for combustion purposes delivered to and used on board shall be recorded by means of a bunker delivery note that shall contain at

least the information specified in appendix V to this Annex.

Regulation 18.6 reads as follows:

The bunker delivery note shall be kept on board the ship in such a place as to be readily available for inspection at all reasonable times. It shall be retained for a period of three years after the fuel oil has been delivered on board.

Interpretation

For application of these regulations it shall be interpreted as applicable to all ships of 400 gross tonnage or above and, at the Administration's discretion, for ships of less than 400 gross tonnage.

The Bunker Delivery Note (BDN) required by regulation 18.5 is acceptable in either hard copy or electronic format provided it contains at least the information specified in appendix V to MARPOL Annex VI and is retained and made available on board in accordance with regulation 18.6. In addition, an electronic BDN shall be protected from edits, modifications or revisions and authentication be possible by a verification method such as a tracking number, watermark, date and time stamp, QR code, GPS coordinates or other verification methods.

Note:

i) *This UI is to be uniformly implemented by IACS Societies from 19 May 2005.*

ii) *Rev.1 of the UI is to be uniformly implemented by IACS Societies from 1 January 2015.*

iii) *Rev.2 of the UI is to be uniformly implemented by IACS Societies from 1 July 2024.*

end

Section 11 SOLAS Convention

SC 120. Access to forecastle spaces on tankers

(1996)
(Rev.1 Nov 2005)
(Rev.2 Aug 2006)
(Corr.1 Jan 2023)
(Corr.2 Oct 2023)

Interpretation of SOLAS regulations II-2/4.5.2.1 and 4.5.2.2, IBC Code paragraph 3.2.3 and 1983 IGC Code paragraph 3.2.4 (Resolution MSC.5(48) as amended by resolution MSC.30(61))

Restriction on boundary openings

SOLAS regulations II-2/4.5.2.1 and 4.5.2.2 read

"5.2.1 Except as permitted in paragraph 5.2.2, access doors, air inlets and openings to accommodation spaces, service spaces, control stations and machinery spaces shall not face the cargo area. They shall be located on the transverse bulkhead not facing the cargo area or on the outboard side of the superstructure or deckhouse at a distance of at least 4% of the length of the ship, but not less than 3 m from the end of the superstructure or deckhouse facing the cargo area. This distance need not exceed 5 m."

"5.2.2 The Administration may permit access doors in boundary bulkheads facing the cargo area or within the 5 m limits specified in paragraph 5.2.1, to main cargo control stations and to such service spaces used as provision rooms, store-rooms and lockers, provided they do not give access directly or indirectly to any other space containing or providing for accommodation, control stations or service spaces such as galleys, pantries or workshops, or similar spaces containing sources of vapour ignition. The boundary of such a space shall be insulated to "A-60" standard, with the exception of the boundary facing the cargo area. Bolted plates for the removal of machinery..."

Paragraph 3.2.3 of the IBC Code reads

"3.2.3 Entrances, air inlets and openings to accommodation, service and machinery spaces and control stations shall not face the cargo area. They shall be located on the end bulkhead not facing the cargo area and/or on the outboard side of the superstructure or deckhouse at a distance of at least 4% of the length (L) of the ship but not less than 3 m from the end of the superstructure or deck-house facing the cargo area. This distance, however, need not exceed 5 m. No doors shall be permitted within the limits mentioned above, except that doors to those spaces not having access to accommodation and service spaces and control stations, such as cargo control stations and store-rooms, may be fitted. Where such doors are fitted, the boundaries of the space shall be insulated to "A-60" standard. Bolted plates for removal of machinery may be fitted within the limits specified above. Wheelhouse doors and wheelhouse windows may be located within the limits specified above so long as they are so designed that a rapid and efficient gas- and vapour-tightening of the wheelhouse can be ensured. Windows and sidescuttles facing the cargo area and on the sides of the superstructures and deck-houses within the limits specified above shall be of the fixed (non-opening) type. Such sidescuttles in the first tier on the main deck shall be fitted with inside covers of steel or equivalent material."

Paragraph 3.2.4 of the 1983 IGC Code reads

"3.2.4 Entrances, air inlets and openings to accommodation spaces, service spaces, machinery spaces and control stations should not face the cargo area. They should be located on the end bulkhead not facing the cargo area or on the outboard side of the superstructure or deck-house or on both at a distance of at least 4% of the length (L) of the ship but not less than 3 m from the end of the superstructure or deck-house facing the cargo area. This distance, however, need not exceed 5 m. Windows and sidescuttles facing the cargo area and on the sides of the superstructures or deck-houses within the distance mentioned above should be of the fixed (non-opening) type. Wheelhouse windows may be non-fixed and wheelhouse doors may be located within the above limits so long as they are so designed that a rapid and efficient gas and vapour tightening of the wheelhouse can be ensured. For ships dedicated to the carriage of cargoes which have neither flammable nor toxic hazards, the Administration may approve relaxations from the above requirements."

Interpretation

Access to forecastle spaces containing sources of ignition may be permitted through doors facing cargo area provided the doors are located outside hazardous areas as defined in IEC Publication 60092-502:1999.

Note:

i) *Rev. 2 of this UI is to be uniformly implemented by IACS Members and Associates by 1 January 2007.*

ii) *For the application of the IGC Code, ~~This~~ this UI is only applicable to gas carriers ships constructed on or after 1 July 1986 but before 1 July 2016.*

end

SC 212 Shipboard fittings and supporting hull structures associated with towing and mooring on conventional vessels

(Sept 2006
(Corr.1 July 2007)
(Corr.2 Oct 2007)
(Corr.3 Dec 2019)
(Rev.1 Nov 2023 Complete Revision)

~~**(SOLAS Reg. II-1/3-8)**~~

~~**Regulations**~~

~~Regulation II-1/3-8 reads:~~

~~**"Regulation 3-8 Towing and mooring equipment**~~

Interpretation of the Reg. II-1/3-8 of the SOLAS as amended by Resolution MSC.474(102)

Regulation II-1/ 3-8 reads as follows:

1 *Paragraphs 4 to 6 of this regulation apply to ships constructed on or after 1 January 2007.*

2 *Paragraphs 7 and 8 of this regulation only apply to ships:*

.1 *for which the building contract is placed on or after 1 January 2024; or*

.2 *in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2024; or*

.3 *the delivery of which is on or after 1 January 2027.*

3 *This regulation does not apply to towing arrangements provided in accordance with regulation 3-4.*

4 *Ships shall be provided with arrangements, equipment and fittings of sufficient safe working load to enable the safe conduct of all towing and mooring operations associated with the normal operation of the ship.*

5 *Arrangements, equipment and fittings provided in accordance with paragraph 4 above shall meet the appropriate requirements of the Administration or an organization recognized by the Administration under regulation I/6.*[1)]

6 *Each fitting or item of equipment provided under this regulation shall be clearly marked with any limitations associated with its safe operation, taking into account the strength of the supporting ship's structure and its attachment to it.*

7 *For ships of 3,000 gross tonnage and above, the mooring arrangement shall be designed, and the mooring equipment including lines shall be selected, in order to ensure occupational safety and safe mooring of the ship, based on the guidelines developed by the Organization.*[2)] *Ship-specific information shall be provided and kept on board.*[3)]

8 *Ships of less than 3,000 gross tonnage should comply with the requirement in paragraph 7 above as far as reasonably practicable, or with applicable national standards of the Administration.*

9 *For all ships, mooring equipment, including lines, shall be inspected and maintained in a suitable condition for their intended purposes.*[4)]

Interpretation

1 The expression "all ships" in SOLAS regulation II-1/3-8.9 means ships constructed before, on, or after 1 January 2009 in accordance with SOLAS regulation II-1/1.3.3

2 While applying the requirements of SOLAS regulation II-1/3-8.4 to regulation II-1/3-8.6 and SOLAS regulation II-1/3-8.8, for ships of less than 3,000 gross tonnage, the following shall be confirmed:

.2 the "Towing and mooring arrangements plan" shall be provided for information, where the maximum brake holding load shall be included in addition to the information provided in section 5 (Towing and mooring arrangements plan) of the annex to MSC.1/Circ.1175/Rev.1.

[1)] Refer to the Guidance on shipboard towing and mooring equipment (MSC.1/Circ.1175) for ships constructed on or after 1 January 2007 but before 1 January 2024 and the Guidance on shipboard towing and mooring equipment (MSC.1/Circ.1175/Rev.1) for ships constructed on or after 1 January 2024.

[2)] Refer to the Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring (MSC.1/Circ.1619).

[3)] Refer to towing and mooring arrangement plan in the Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring (MSC.1/Circ.1619).

[4)] Refer to the Guidelines for inspection and maintenance of mooring equipment including lines (MSC.1/Circ.1620).

A technical specification document of the mooring lines supplied with the ship shall be provided for information. The manufacturers' recommended minimum diameter D of each fitting in contact with the mooring lines and the Line Design Break Force (LDBF) of the mooring lines shall be included in the document;

.2 for confirmation of the appropriate selection of mooring line, the properties of mooring lines related to LDBF and bend radius (D/d ratio) shall be submitted to the Administration or the RO. A warning shall be provided that the wear rate of lines may be higher for lower diameter (paragraph 5.6 of MSC.1/Circ.1620); and

.3 at delivery of the ship, the Administration or the RO shall confirm that the towing and mooring arrangements plan is provided on board.

3 While applying the requirements of SOLAS regulation II-1/3-8.4 to regulation II-1/3-8.6 and the SOLAS regulation II-1/3-8.7, for ships of 3,000 gross tonnage and above, the following shall be confirmed in addition to those specified under paragraph 2 of this interpretation:

.1 a document shall be provided by the designer for information and as a supplement to the towing and mooring arrangements plan, confirming that MSC.1/Circ.1619 has been considered. The document shall explicitly state that the deviations, if any, were unavoidable;

.2 deviations shall be recorded (paragraph 6.1 of MSC.1/Circ.1619), justification and suitable safety measures shall be provided (paragraph 6.2 of MSC.1/Circ.1619) in the supplement to the towing and mooring arrangements plan. A reference to the supplement shall be included in the towing and mooring arrangements plan (paragraph 6.3 of MSC.1/Circ.1619);

.3 if deviations are not found necessary, and the supplement is not needed, then this shall be mentioned explicitly in the towing and mooring arrangements plan;

.4 the mooring maximum brake holding load shall be less than 100% of the Ship Design Minimum Breaking Load (MBLSD) (paragraphs 5.2.3.3 and 5.2.4 of MSC.1/Circ.1619). The winches shall be fitted with brakes that allow for the reliable setting of the brake rendering load; and

.5 at delivery of the ship, the Administration or the RO shall confirm that the towing and mooring arrangements plan and the supplement describing deviations and suitable safety measures is provided on board.

4 While applying the requirements of SOLAS regulation II-1/3-8.9, the following shall be complied with, and compliance shall be confirmed by the surveyor at the initial survey for new ships or at the first annual / intermediate / renewal survey for the issuance of the Cargo Ship Safety Construction Certificate or renewal survey for the issuance of the Passenger Ship Safety Certificate after 1 January 2024 for existing ships:

.1 procedures for mooring operations, inspection and maintenance of mooring equipment, including mooring lines, shall be established and available on board (paragraph 3.1 of MSC.1/Circ.1620), taking into account industry practices (section 7 of MSC.1/Circ.1620);

.2 procedures to allow the identification and control of mooring lines, tails and associated attachments shall be established and available on board (paragraph 3.3 of MSC.1/Circ.1620);

.3 the periodic inspection of mooring lines, mooring line tails and associated attachments shall be included in the onboard maintenance plan or equivalent maintenance management system (paragraph 4.1.1 of MSC.1/Circ.1620);

.4 manufacturers' criteria for replacement of mooring lines shall be available (paragraph 4.3.1 of MSC.1/Circ.1620);

.5 records of the original design concept, equipment, arrangements and specifications shall be available on board (paragraph 4.4.4 of MSC.1/Circ.1620). For ships the keels of which were laid before 1 January 2007 and without appropriate documentation, owners may establish the MBLSD for mooring based on the safe working load of mooring equipment provided on board. If no safe working load is specified, then owners are advised to check strength of mooring equipment and their supporting hull structure based on MSC.1/Circ.1175/Rev.1 and determine MBLSD based on actual capacity of the equipment and their supporting hull structure on board. Manufacturers' test certificates for mooring lines, joining shackles and synthetic tails shall be kept on board and properly linked back to the equipment, if available (paragraph 6.2 of MSC.1/Circ.1620); and

.6 a document shall be provided on board for gathering the information above and describing how the information listed above is filed and collected.

5 While applying the requirements of SOLAS regulation II-1/3-8.9, the following shall be complied with, and the compliance shall be confirmed by the surveyor at every periodical survey for endorsement/issue of the Cargo Ship Safety Construction Certificate or every renewal survey for the Passenger Ship Safety Certificate after 1 January 2024 for existing ships:

.1 the records of inspection and maintenance of mooring equipment and inspection and replacement of mooring lines, since the last periodical survey, shall be kept updated and available on board (paragraphs 4.4.3 and 6.1 of MSC.1/Circ.1620).

Note:

i) *This Unified Interpretation is to be uniformly implemented by IACS Societies on ships constructed on or after 1 January 2007.*

ii) *The "date of contract for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to IACS Procedural Requirement (PR) No. 29.*

iii) *Revision 1 of this UI is to be uniformly implemented by IACS Societies;*

- *for interpretations 2 and 3, on ships contracted for construction on or after 1 January 2024, and*
- *for interpretations 1, 4 and 5, on or after 1 January 2024.*

end

SC 264 Non-combustible material as 'steel or equivalent' for ventilation ducts (SOLAS II-2, Reg. 9.7.1.1)

(Dec 2013)
(Corr.1 Dec 2023)
SOLAS II-2, Reg. 9.7.1 states:

~~**7.1.1** Ventilation ducts shall be of steel or equivalent material. However, short ducts, not generally exceeding 2 m in length and with a free cross-sectional area [5] not exceeding 0,02 m^2, need not be steel or equivalent subject to the following conditions:~~

~~**.1** subject to paragraph 7.1.1.2 the ducts are made of any material which has low flame spread characteristics;~~

~~**.2** on ships constructed on or after 1 July 2010, the ducts shall be made of heat resisting non-combustible material, which may be faced internally and externally with membranes having low flame-spread characteristics and, in each case, a calorific value† not exceeding 45 MJ/m^2 of their surface area for the thickness used;~~

~~**.3** the ducts are only used at the end of the ventilation device; and~~

~~**.4** the ducts are not situated less than 600 mm, measured along the duct, from an opening in an "A" or "B" class division including continuous "B" class ceiling.~~

7.1.1 Ventilation ducts, including single and double wall ducts, shall be of steel or equivalent material except flexible bellows of short length not exceeding 600 mm used for connecting fans to the ducting in air-conditioning rooms. Unless expressly provided otherwise in paragraph 7.1.6, any other material used in the construction of ducts, including insulation, shall also be non-combustible. However, short ducts, not generally exceeding 2 m in length and with a free cross-sectional area [5] not exceeding 0,02 m^2, need not be of steel or equivalent material, subject to the following conditions:

.1 the ducts shall be made of non-combustible material, which may be faced internally and externally with membranes having low flame-spread characteristics and, in each case, a calorific value [6] not exceeding 45 MJ/m^2 of their surface area for the thickness used;

.2 the ducts are only used at the end of the ventilation device; and

.3 the ducts are not situated less than 600 mm, measured along the duct, from an opening in an "A" or "B" class division, including continuous "B" class ceiling.

Interpretation

With respect ~~only~~ to SOLAS II-2/9.7.1.1, a ventilation duct made of material other than steel may be considered equivalent to a ventilation duct made of steel, provided the material is non-combustible and has passed a standard fire test in accordance with Annex 1: Part 3 of the FTP Code as non-load bearing structure for 30 minutes following the requirements for testing "B" class divisions.

[5] The term free cross-sectional area means, even in the case of a pre-insulated duct, the area calculated on the basis of the inner dimensions of the duct itself and not the insulation.

[6] Refer to the recommendations published by the International Organization for Standardization, in particular publication ISO 1716:2002, Reaction to the fire tests for building products – Determination of the heat of combustion.

Note:

i) *This Unified Interpretation is to be uniformly implemented by IACS Societies for ships contracted for construction ~~from~~ on or after 1 July 2015.*

ii) *The "contracted for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to IACS Procedural Requirement (PR) No. 29.*

end

SC 265 ~~Code of safe practice for cargo stowage and securing – Annex 14~~ Revised guidelines for cargo securing manual and code of safe practice for cargo stowage and securing - scope of application

(Dec 2013)
(Del Nov 2023)

Deleted in Nov 2023 as all recommendations are considered by MSC.1/Circ.1352/Rev.1.

~~**MSC.1/Circ.1352 – Annex - Amendments to the Code of Safe Practice for Cargo Stowage and Securing** (CSS Code): Annex 14 – Guidance on Providing Safe Working Conditions for Securing of Containers on Deck~~

~~**6** Design~~

~~**6.2** Provisions for safe access~~

~~**6.2.1** General provisions~~

~~**6.2.1.1.** The minimum clearance for transit areas should be at least 2 m high and 600 mm wide.~~

~~**Interpretation** - See Table, Dimensions B, J, K1.~~

~~**6.2.2** Lashing position design (platforms, bridges and other lashing positions)~~

~~**6.2.2.1.** Lashing positions should be designed to eliminate the use of three high lashing bars and be positioned in close proximity to lashing equipment stowage areas. Lashing positions should be designed to provide a clear work area which is unencumbered by deck piping and other obstructions and take into consideration:~~

~~**.1** the need for containers to be stowed within safe reach of the personnel using the lashing position so that the horizontal operating distance from the securing point to the container does not exceed 1,100 mm and not less than 220 mm for lashing bridges and 130 mm for other positions;~~

~~**Interpretation** - See Table, Dimensions C1, C2, C3.~~

~~**6.2.2.2.** The width of the lashing positions should preferably be 1,000 mm, but not less than 750 mm.~~

~~**Interpretation** - See Table, Dimensions A, GL, GT, I, K.~~

~~**6.2.2.3.** The width of permanent lashing bridges should be:~~

~~**.1** 750 mm between top rails of fencing; and~~

~~**Interpretation** - See Table, Dimension F.~~

~~**.2** a clear minimum of 600 mm between storage racks, lashing cleats and any other obstruction.~~

~~**Interpretation** - See Table, Dimension F1.~~

~~**6.4** Lighting design~~

~~. A lighting plan should be developed to provide for:~~

~~**.1** the proper illumination of access ways, not less than 10 lux (1 foot candle) see footnote, taking into account the shadows created by containers that may be stowed in the area to be lit, for example different length containers in or over the work area;~~

~~**.4** the illumination intensity should take into consideration the distance to the uppermost reaches where cargo securing equipment is utilized.~~

~~**Interpretation** - For the upper tier of a lashing bridge, lights at the port and starboard extremities are generally adequate.~~

~~Container securing dimensions~~

Dimension (see Figures)	Description	Requirement (mm)
A	Width of work area between container stacks	750 minimum
B	Distance between lashing plates on deck or on hatch covers	600 minimum
C1	Distance from lashing bridge fencing to container stack	1100 minimum
C2	Distance from lashing plate to container stack (lashing bridge)	220 minimum
C3	Distance from lashing plate to container stack (elsewhere)	130 minimum
F	Width of lashing bridge between top rails of fencing	750 minimum
F1	Width of lashing bridge between storage racks, lashing cleats and any other obstruction	600 minimum
GL	Width of working platform for outboard lashing – fore/aft	750 minimum
GT	Width of working platform for outboard lashing – transverse	750 minimum
I	Width of work platform at end of hatch cover or adjacent to superstructure	750 minimum
J	Distance from edge of hatch cover to fencing	600 minimum
K	Width of lashing bridge between top rails of fencing	750 minimum
K1	Width of lashing bridge between the pillars of the lashing bridge	600 minimum

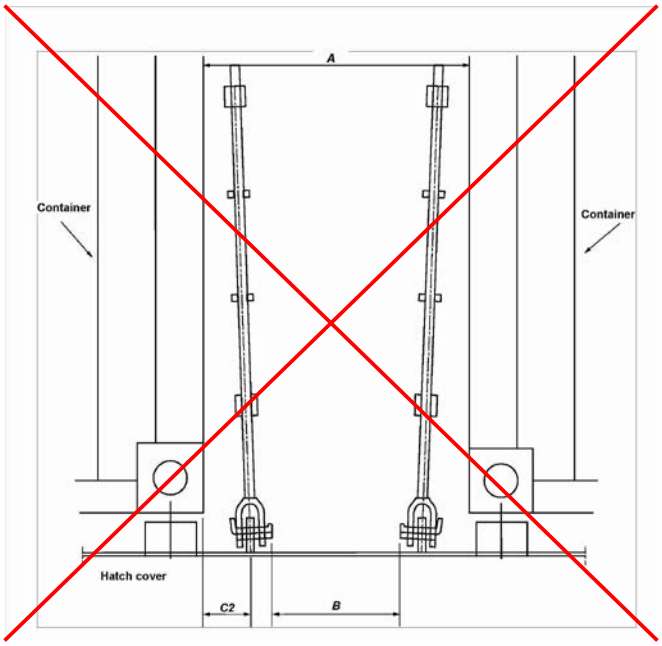
A
Container
Container
Hatch cover
C2
B

Fig.1

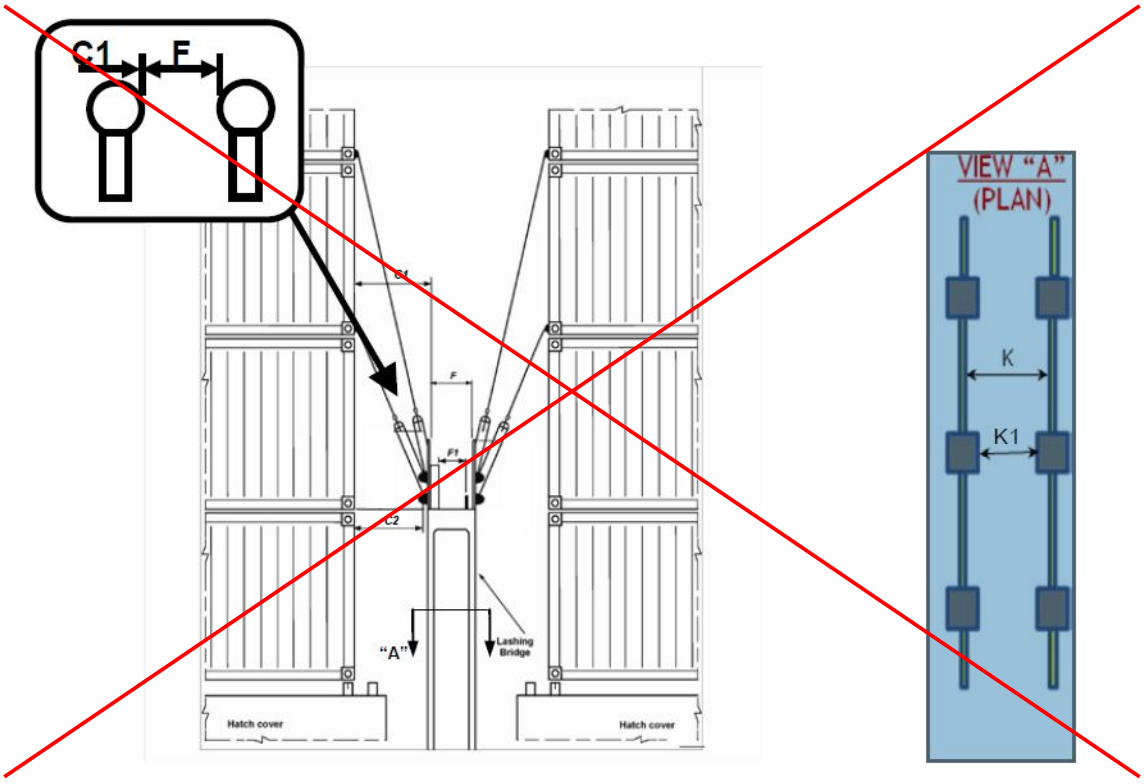
C1
F
C1
F
F1
C2
"A"
Lashing Bridge
Hatch cover
Hatch cover
VIEW "A"
(PLAN)
K
K1

Fig.2

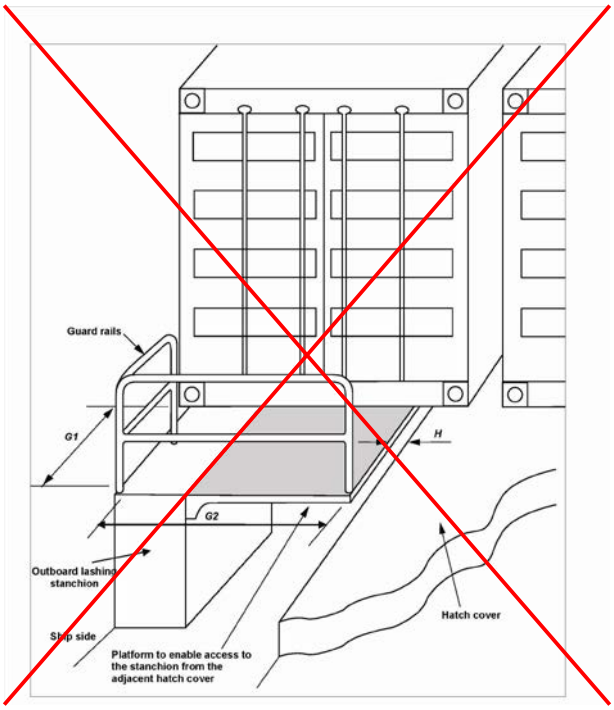

Fig.3

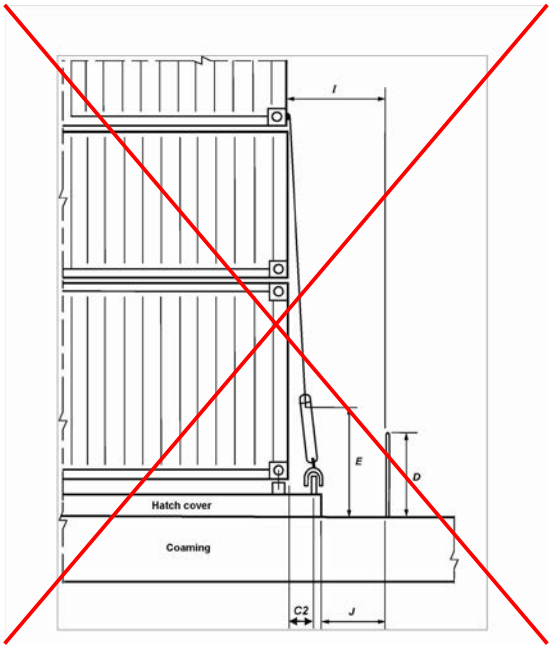

Fig.4

~~Note:~~

i) ~~*This Unified Interpretation is to be uniformly implemented by IACS Societies on or after 1 January 2015 on all ships as defined in Section 2 of Annex 14 of the CSS Code, to which the administration has required the application of MSC.1/Circ.1352.*~~

end

SC 298 Interpretations of various Performance Standards related to GMDSS radio installations

(Dec 2013)
(Corr.1 Nov 2023)

Operative paragraphs 2.1 and 3.1 of resolution MSC.508(105) respectively read:

2 RECOMMENDS Governments to ensure that NAVTEX receiver equipment:

.1 if installed on or after 1 January 2024, conforms to performance standards not inferior to those specified in the annex to the present resolution;

3 ALSO RECOMMENDS that equipment for the reception of NBDP broadcasts of navigational and meteorological warnings and urgent information to ships by HF:

.1 if installed on or after 1 January 2024, conforms to performance standards not inferior to those specified in the annex to the present resolution; and

Operative paragraphs 2 and 3 of resolution MSC.510(105) respectively read:

2 RECOMMENDS Governments to ensure that radar SARTs that will form part of the GMDSS, conform to performance standards not inferior to those specified in the annex to this resolution;

3 DETERMINES that this resolution supersedes resolutions A.530(13) and A.802(19), as amended, as from 1 January 2024;

Operative paragraph 2.1 of resolution MSC.511(105) read:

2 RECOMMENDS Governments to ensure that shipborne VHF radio installations capable of voice communication and digital selective calling which will form part of the GMDSS:

.1 if installed on or after 1 January 2024, conform to performance standards not inferior to those specified in the annex to the present resolution;

Operative paragraph 2.1 of resolution MSC.512(105) read:

2 RECOMMENDS Governments to ensure that shipborne MF and MF/HF radio installations capable of voice communication, digital selective calling and reception of maritime safety information which will form part of the GMDSS:

.1 if installed on or after 1 January 2024, conform to performance standards not inferior to those specified in the annex to the present resolution;

Operative paragraph 3.1 of resolution MSC.513(105) read:

3 RECOMMENDS Governments to ensure that every Inmarsat-C ship earth station which forms part of the GMDSS:

.1 if installed on or after 1 January 2024 conforms to performance standards not inferior to those specified in the annex to the present resolution; and

Operative paragraph 2.1 of resolution MSC.515(105) read:

2 RECOMMENDS Governments to ensure that survival craft portable two-way VHF radiotelephone apparatus:

.1 if installed on or after 1 January 2024 conforms to performance standards not inferior to those specified in the annex to the present resolution;

Operative paragraph 2.1 of resolution MSC.516(105) read:

2 RECOMMENDS Governments to ensure that on-scene (aeronautical) two-way VHF radiotelephone apparatus for use in search and rescue operations:

.1 if installed on or after 1 January 2024, conforms to performance standards not inferior to those specified in the annexes to resolution MSC.80(70), as amended by the present resolution; and

Operative paragraph 2.1 of resolution MSC.517(105) read:

2 RECOMMENDS Governments to ensure that a shipborne integrated communication system (ICS) when used in the GMDSS:

.1 if installed on or after 1 January 2024 conforms to performance standards not inferior to those specified in the annex to the present resolution; and

Interpretation:

For application of resolutions MSC.508(105), MSC.511(105)[7)], MSC.512(105)[7)], MSC.513(105)[7)], MSC.515(105), MSC.516(105) and MSC.517(105), the phrase “installed on or after 1 January 2024” shall be interpreted as follows:

a) for ships for which the building contract is placed on or after 1 January 2024, or in the absence of the contract, the keel of which is laid or which are at a similar stage of construction on or after 1 January 2024, ”installed on or after 1 January 2024” means any installation on the ship; and

b) for ships other than those ships prescribed in (a) above, ”installed on or after 1 January 2024” means a contractual delivery date for the equipment or, in the absence of a contractual delivery date, the actual delivery of the equipment to the ship on or after 1 January 2024.

The revised performance standards specified in the annex of resolution MSC.510(105) (Radar SARTs) shall apply to;

c) the equipment installed for ships for which the building contract is placed on or after 1 January 2024, or in the absence of the contract, for ships the keel of which is laid or which are at a similar stage of construction on or after 1 January 2024; and

d) For ships other than those ships prescribed in (c) above, the equipment with, a contractual delivery date on or after 1 January 2024 or, in the absence of a contractual delivery date, an actual delivery date of the equipment to the ship on or after 1 January

Note:

[7)] With reference to MSC.1 Circular 1676, this circular allows, based on the flag state’s acceptance, postponement of installation of equipment according to MSC.511(105), MSC.512(105) and MSC.513(105) until 1 January 2028.

i) *This Unified Interpretation is to be uniformly implemented by IACS member Societies on or after 1 January 2024.*

end

SC 300 Containment of fire: details of fire insulation of duct penetrations

(Aug 2023)

Interpretation of the paragraphs 9.7.3.1.2 and 9.7.3.2 of SOLAS Chapter II-2 as amended by 2017 SOLAS Amendments

The paragraph 9.7.3.1.2 reads as follows:

7.3.1 *Ducts passing through "A" class divisions shall meet the following requirements:*

.1 *...*

.2 *where ventilation ducts with a free cross-sectional area exceeding 0,02* m^2*, but not more than 0,075* m^2*, pass through "A" class divisions, the openings shall be lined with steel sheet sleeves. The ducts and sleeves shall have a thickness of at least 3 mm and a length of at least 900 mm. When passing through bulkheads, this length shall be divided preferably into 450 mm on each side of the bulkhead. These ducts, or sleeves lining such ducts, shall be provided with fire insulation. The insulation shall have at least the same fire integrity as the division through which the duct passes; and*

Interpretation

The fire insulation required by regulation SOLAS II-2/9.7.3.1.2 should be provided only to the part of the duct and/or sleeve that is on the same side of the division being fire insulated, and be extended for a minimum of 450 mm along the duct and/or sleeve.

The paragraph 9.7.3.2 reads as follows:

7.3.2 *Ventilation ducts with a free cross-sectional area exceeding 0,02* m^2 *passing through "B" class bulkheads shall be lined with steel sheet sleeves of 900 mm in length, divided preferably into 450 mm on each side of the bulkheads unless the duct is of steel for this length.*

Interpretation

When a duct passing through a division is to be in accordance with SOLAS regulations II-2/9.3.2 and II-2/9.7.3.2, no clearance should be allowed between the duct and the division.

Note:

i) *This Unified Interpretation is to be uniformly implemented by IACS Societies on ships contracted for construction on or after 1 July 2024.*

ii) *The "contracted for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to IACS Procedural Requirement (PR) No. 29.*

end